I. CLAIMS

The following Listing of Claims shall replace all prior versions, and listings, of claims in application.

Listing of Claims:

Claim 1 (Currently Amended) A computer implemented method for simulating the transition of one or more bonds between a plurality of price buckets estimating a bucket transition distribution for one or more bonds, comprising:

identifying [[a]] the plurality of price buckets;

identifying a plurality of attributes related to a first bond, wherein the plurality of attributes includes a first bond price;

associating the first bond with a starting bucket based on the first bond price, wherein the starting bucket is one of the plurality of price buckets;

calculating one or more coefficients based on a historical data set related to the first bond, wherein the historical data set relates to the plurality of attributes;

retrieving a plurality of values related to the first bond;

calculating a plurality of bucket transition probabilities for the first bond based on at least the one or more coefficients and the plurality of attributes values, wherein each of the plurality of bucket transition probabilities reflects the probability of the first bond transitioning from the start bucket to one of the plurality of price buckets; [[and]]

estimating a first bucket transition distribution for the first bond using the bucket transition probabilities;

simulating the transition of the first bond between the starting bucket and the plurality of

price buckets using the first bucket transition distribution, thereby producing a plurality of

simulated attributes; and

simulating the transition of the first bond between the plurality of price buckets using the

simulated attributes.

Claim 2 (Currently amended) The computer implemented method of claim 1, wherein one of the

price buckets corresponds to an exit state, and wherein ~~the estimating the bucket~~ simulating the

transition ~~distribution for~~ of the first bond between the plurality of price buckets includes

estimating a plurality of bucket transitions based on the bucket transition probabilities until the

exit state or a maturity date of the first bond is reached, thereby completing a first simulation.

Claim 3 (Previously presented) The computer implemented method of claim 2, wherein the exit

state is one of a default and a call.

Claim 4 (Currently amended) The computer implemented method of claim 1, wherein ~~the~~

~~estimating the bucket~~ simulating the transition of the first bond between the plurality of price

buckets ~~distribution~~ includes determining the probability that the first bond is in a particular

bucket at a particular time.

Claim 5 (Currently amended) The computer implemented method of claim 4, wherein one of the

price buckets corresponds to a default state and ~~the estimating the bucket~~ simulating the

transition of the first bond between the plurality of price buckets ~~distribution~~ includes

determining a default rate for a particular time period for the first bond.

Claim 6 (Currently amended) The computer implemented method of claim 5, wherein ~~the estimating the bucket~~ simulating the transition of the first bond between the plurality of price buckets ~~distribution~~ includes determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.

Claim 7 (Previously presented) The computer implemented method of claim 2, further including conducting multiple simulations.

Claim 8 (Previously presented) The computer implemented method of claim 2, further including calculating a plurality of bucket transition probabilities for a second bond; estimating a bucket transition distribution for the second bond using the bucket transition probabilities; and grouping the estimated bucket transition distributions for the first bond and the second bond, thereby enabling an evaluation of a credit risk of the first bond and the second bond.

Claim 9 (Currently amended) A system for estimating the transition of one or more bonds between a plurality of price buckets ~~estimating a bucket transition distribution for one or more bonds~~, comprising:

means for identifying [[a]] the plurality of price buckets;

means for identifying a plurality of attributes related to a first bond, wherein the plurality of attributes include a first bond price;

means for associating the first bond with a starting bucket based on the first bond price, wherein the starting bucket is one of the plurality of price buckets;

means for calculating one or more coefficients based on a historical data set related to the first bond, wherein the historical data set relates to the plurality of attributes;

~~means for retrieving a plurality of value related to the first bond;~~

means for calculating a plurality of bucket transition probabilities for the first bond based on at least the one or more coefficients and the plurality of attributes ~~values,~~ wherein each of the plurality of bucket transition probabilities reflects the probability of the first bond transitioning from the start bucket to one of the plurality of price buckets; [[and]]

means for estimating a first bucket transition distribution for the first bond using the bucket transition probabilities;

means for simulating the transition of the first bond between the starting bucket and at least one of the plurality of price buckets using the first bucket transition distribution, thereby producing a plurality of simulated attributes; and

means for simulating the transition of the first bond between the plurality of price buckets using the simulated attributes..

Claim 10 (Currently amended) The system of claim 9, wherein the means for simulating the transition of the first bond between the plurality of price buckets further includes ~~including means for~~ estimating a plurality of bucket transitions based on the bucket transition probabilities until an exit state, corresponding to one of the price buckets, or a maturity date of the first bond is reached, thereby completing a first simulation.

Claim 11 (Original) The system of claim 10, wherein the exit state is one of a default and a call.

Claim 12 (Currently amended) The system of claim 9, wherein the means for simulating the transition of the first bond between the plurality of price buckets estimating includes a means for determining the probability that the first bond is in a particular bucket at a particular time.

Claim 13 (Currently amended) The system of claim 12, wherein the means for simulating the transition of the first bond between the plurality of price buckets estimating includes a means for determining a default rate for a particular time period for the first bond.

Claim 14 (Currently amended) The system of claim 13, wherein the estimating means simulating the transition of the first bond between the plurality of price buckets includes a means for determining a cumulative default rate for a number of time periods by summing default balances for each of the number of time periods and dividing the sum by an average balance for a first of the number of time periods.

Claim 15 (Previously presented) The system of claim 9, further including conducting multiple simulations.

Claim 16 (Previously presented) The system of claim 9 for estimating a bucket transition distribution for one or more bonds, further comprising: means for calculating a plurality of bucket transition probabilities for a second bond; means for estimating a bucket transition distribution for the second bond using the bucket transition probabilities of the second bond; and

means for grouping a plurality of the bucket transition distributions for the first bond and the

second bond, thereby enabling an evaluation of the credit risk of the first bond and the second

bond.

Claim 17 (Currently Amended) A computer readable medium for simulating the transition of one

or more bonds between a plurality of price buckets estimating a bucket transition distribution for

one or more bonds, the medium comprising a program to cause a processor to implement:

identifying [[a]] the plurality of price buckets;

identifying a plurality of attributes related to a first bond, wherein the plurality of

attributes includes a first bond price;

associating the first bond with a starting bucket based on the first bond price, wherein the

starting bucket is one of the plurality of price buckets;

calculating one or more coefficients based on a historical data set related to the first bond,

wherein the historical data set relates to the plurality of attributes;

retrieving a plurality of values related to the first bond;

calculating a plurality of bucket transition probabilities for the first bond based on at least

the one or more coefficients and the plurality of attributes values, wherein each of the plurality of

bucket transition probabilities reflects the probability of the first bond transitioning from the start

bucket to one of the plurality of price buckets; [[and]]

estimating a first bucket transition distribution for the first bond using the bucket

transition probabilities;

simulating the transition of the first bond between the starting bucket and at least one of

the plurality of price buckets using the first bucket transition distribution, thereby producing a

plurality of simulated attributes; and

simulating the transition of the first bond between the plurality of price buckets using the

simulated attributes.

Claim 18 (Currently amended) The computer readable medium of claim 17, wherein one of the

price buckets corresponds to an exit state, and wherein simulating the transition of the first bond

between the plurality of price buckets estimating a bucket transition distribution step includes

estimating a plurality of bucket transitions based on the bucket transition probabilities until the

exit state or a maturity date of the first bond is reached, thereby completing a first trial.

Claim 19 (Previously presented) The computer readable medium of claim 18, wherein the exit

state is one of a default and a call.

Claim 20 (Currently amended) The computer readable medium of claim 19, wherein simulating

the transition of the first bond between the plurality of price buckets estimating he bucket

transition distribution includes determining the probability that the first bond is in a particular

bucket at a particular time.

Claim 21 (Currently amended) The computer readable medium of claim 20, wherein one of the

price buckets corresponds to a default state and simulating the transition of the first bond

between the plurality of price buckets estimating the bucket transition distribution includes

determining a default rate for a particular time period for the first bond.

Claim 22 (Currently amended) The computer readable medium of claim 21, wherein <u>simulating the transition of the first bond between the plurality of price buckets</u> ~~estimating the bucket transition distribution~~ includes determining a cumulative default rate for a number of time periods by summing a plurality of default balances for each of the number of time periods and dividing a sum by an average balance for a first of the number of time periods.

Claim 23 (Currently amended) The computer readable medium of claim 17, wherein <u>simulating the transition of the first bond between the plurality of price buckets</u> ~~the estimating step~~ includes repeatedly estimating a plurality of bucket transitions based on the bucket transition probabilities unit the exit state or maturity date of the first bond is reached, thereby completing multiple trials.

Claim 24 (Previously presented) The computer readable medium of claim 17, further including calculating a plurality of bucket transition probabilities for a second bond; estimating a bucket transition distribution for the second bond using the bucket transition probabilities for the second bond; and grouping the bucket transition distributions for the first bond and the second bond, thereby enabling an evaluation of the credit risk of the bonds.

Claim 25 (Currently amended) A device for <u>simulating the transition of one or more bonds between a plurality of price buckets</u> ~~estimating a bucket transition distribution for one or more bonds~~, comprising a processor configured to:

      identify [[a]] <u>the</u> plurality of price buckets;

calculate a plurality of bucket transition probabilities for a first bond; [[and]]

estimate a bucket transition distribution for the first bond using the bucket transition

probabilities; and

simulate the transition of the bond between the plurality of price buckets.

Claim 26 (Previously presented) The device of claim 25, wherein one of the price buckets

corresponds to an exit state, and wherein the processor is configured to estimate bucket

transitions based on the bucket transition probabilities until the exit state or a maturity date of the

first bond is reached, thereby completing a first simulation.

Claim 27 (Original) The device of claim 26, wherein the exit state is one of a default and a call.

Claim 28 (Previously presented) The device of claim 27, wherein the processor is configured to

determine a probability that the first bond is in a particular bucket at a particular time.

Claim 29 (Previously presented) The device of claim 28, wherein one of the price buckets

corresponds to a default state and the processor is configured to determine a default rate for a

particular time period for the first bond.

Claim 30 (Original) The device of claim 29, wherein the processor is configured to determine a

cumulative default rate for a number of time periods by summing default balances for each of the

number of time periods and dividing the sum by an average balance for a first of the number of

time periods.

Claim 31 (Previously presented) The device of claim 26, wherein the processor is configured to repeatedly estimate bucket transitions based in the bucket transition probabilities until the exit state or maturity date of the first bond is reached, thereby completing multiple simulations.

Claim 32 (Previously presented) The device of claim 26, wherein the processor is further configured to calculate a plurality of bucket transition probabilities for a second bond; estimate a bucket transition distribution for the second bond using the calculated bucket transition probabilities for the second bond; and group the bucket transition distributions for the first bond and the second bond, thereby enabling an evaluation of the credit risk of the first bond and the second bond.